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(81) Designated States (*national*): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.

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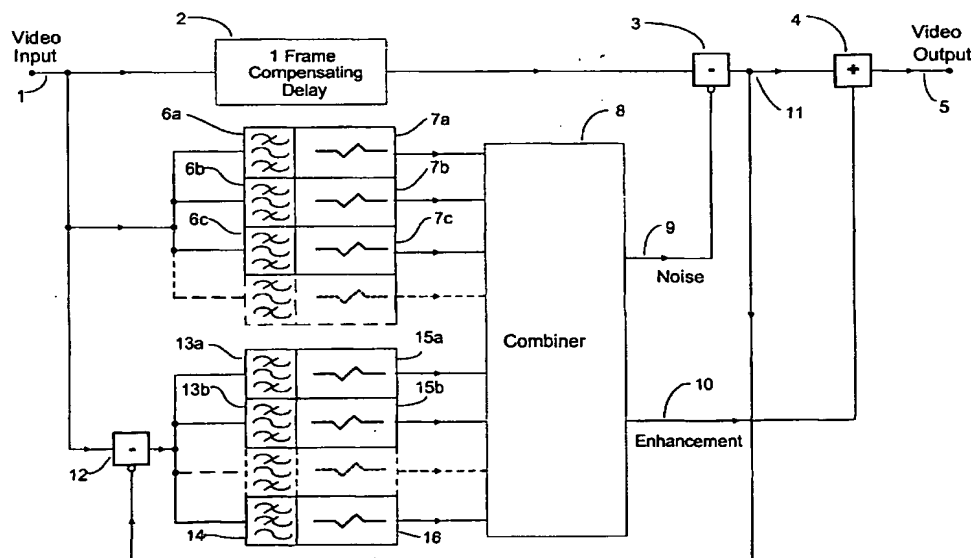
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(54) Title: VIDEO NOISE REDUCTION APPARATUS AND METHOD



(57) Abstract: A video noise reducer divides a signal into spatial frequency bands and derives both recursively and non-recursively filtered signals for each band. Both signals are processed non-linearly. These signals are combined in ways that vary between the bands to provide a noise signal and a detail signal. A clean video signal with all noise removed is used in the recursive loop. The output signal includes detail enhancement and may have a subjectively pleasant amount of noise added back.

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For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

INTERNATIONAL SEARCH REPORT

Inventor's Application No
PCT/GB 03/03050

A. CLASSIFICATION OF SUBJECT MATTER
IPC 7 H04N5/21 H04N7/26

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)
IPC 7 H04N

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

INSPEC, EPO-Internal, WPI Data, PAJ

C. DOCUMENTS CONSIDERED TO BE RELEVANT

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X A	US 6 067 125 A (MAY WILLIAM D) 23 May 2000 (2000-05-23) column 1, line 20 - line 23 column 1, line 55 - line 62 column 3, line 9 - line 13 figure 1	1, 10, 22, 31 2-9, 11-21, 23-30, 32-34
A	US 5 903 680 A (SCHUTTEN ROBERT J ET AL) 11 May 1999 (1999-05-11) column 3, line 17 - line 25 column 6, line 29 - line 62 column 7, line 5 - line 16 figures 2, 8, 10	1-34

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☒ Further documents are listed in the continuation of box C.

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C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

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A	EP 0 147 073 A (VICTOR COMPANY OF JAPAN) 3 July 1985 (1985-07-03) abstract page 14, line 6 -page 19, line 25 figures 3,4 ---	1-34
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In application No
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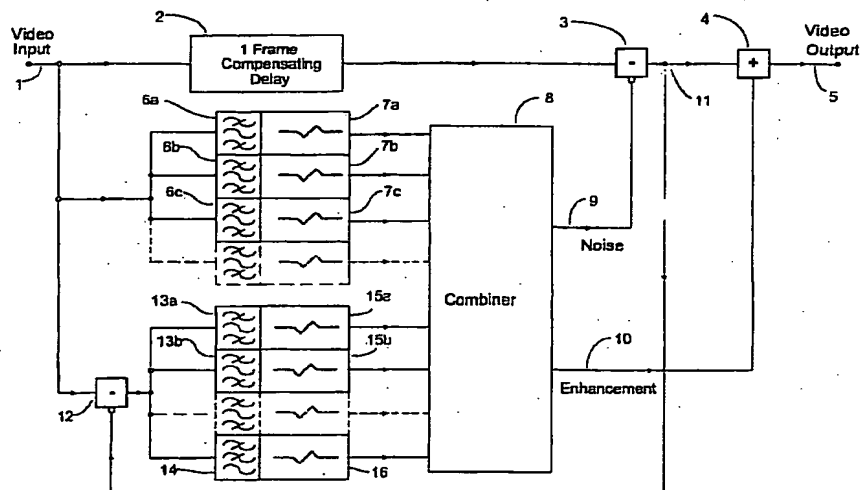
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(54) Title: IMPROVED VIDEO PROCESSING



(57) Abstract: A video noise reducer divides a signal into spatial frequency bands and derives both recursively and non-recursively filtered signals for each band. Both signals are processed non-linearly. These signals are combined in ways that vary between the bands to provide a noise signal and a detail signal. A clean video signal with all noise removed is used in the recursive loop. The output signal includes detail enhancement and may have a subjectively pleasant amount of noise added back.